

CORONARY

ACUTE CORONARY SYNDROME

CRT-100.03

Cardiogenic Shock and ST-elevation Myocardial Infarction: Do Patients With Prior CABG Or Prior PCI Do Better?



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BACKGROUND Patients with ST-elevation myocardial infarction (STEMI) and cardiogenic shock (CS) have extremely high mortality rates. We sought to assess the effect of previous surgical revascularization by coronary artery bypass grafting (CABG) or percutaneous coronary intervention (PCI) on in-hospital outcomes of STEMI patients with CS undergoing primary PCI.

METHODS Between January 2010 and May 2017, a total of 241 patients were admitted to our institution with STEMI and CS, defined by New York State Percutaneous Coronary Interventions Reporting System (PCIRS) as acute and persistent systolic blood pressure <80 mmHg on mechanical or pharmacological support. Baseline clinical, angiographic and procedural characteristics, as well as in-hospital outcomes, were prospectively collected among all patients undergoing primary PCI as part of the New York State PCIRS data collection.

RESULTS Patients with a prior CABG were older and had a history of congestive heart failure, hypertension, dyslipidemia, and diabetes (Table). The left anterior descending (LAD) artery was usually the culprit vessel in post-PCI and revascularization naïve patients, and a vein graft in post-CABG patients. Short- and long-term outcomes are shown in the table.

	Prior CABG (n=12)	Prior PCI (n=53)	No Prior Revascularization (n=176)	p value
Age	73.5±7.5	64.1±12.1	64.9±13.2	0.003
Male (%)	10 (83.3)	32 (60.4)	117 (66.5)	0.31
Hypertension (%)	11 (91.7)	38 (73.1)	88 (52.1)	0.002
Dyslipidemia (%)	11 (91.7)	35 (67.0)	57 (33.7)	<.0001
Diabetes mellitus (%)	6 (50)	13 (25)	88 (52.1)	0.01
Congestive heart failure (%)	2 (16.7)	8 (15.4)	7 (4.0)	0.01
IABP/Impella (%)	6 (50.0)	37 (69.8)	112 (63.6)	0.41
In-hospital and 30 day mortality (%)	4 (40.0)	15 (30)	59 (33.5)	0.80
12 month mortality (%)	5 (41.7)	18 (34.0)	66 (37.5)	0.03
TIMI Major Bleed (%)	0	2 (3.8)	37 (21.1)	0.006
Stroke (%)	0	0	2 (1.1)	0.93
MACCE (Death/MI/CVA) (%)	5 (41.7)	22 (41.5)	108 (61.3)	0.87

CONCLUSIONS The results of this study show that in patients with STEMI and CS undergoing primary PCI: 1) Patients with a prior history of CABG are usually older and have more comorbidities; 2) short-term mortality rates are similar for all three groups; 3) the 12-month mortality rates are higher in post-CABG patients; and 4) major bleeding complications are more frequent in revascularization naïve patients.

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Radial Access And Early Complete Revascularization as Factors Associated With Lower Mortality In Patients With ACS SST



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INTRODUCTION Many changes have occurred throughout the development of primary coronary angioplasty: modalities of door-balloon time reduction, drug-eluting stents, antithrombotic drugs, etc. Transradial access (TRA) nearly eliminates access complications and reduces hospitalization duration, costs, and periprocedural morbidity, even in the emergent setting. Although complete coronary revascularization is associated with improved cardiac function and better long-term prognosis, current guidelines recommend only treating the culprit lesion; however, there is no consensus about the best treatment strategy for this clinical syndrome. Both TRA and complete coronary revascularization have added great clinical impact' although they aren't systematically adopted by all groups.

OBJECTIVE To evaluate clinical characteristics and the procedure of primary coronary angioplasty between two periods of time according to the introduction of progressive improvements.

MATERIAL AND METHODS Between July 2000 and September 2017, direct or primary coronary angioplasty procedures were analyzed (n=473). The population was divided in two groups: period of time **2000-2009 Group "A"** (n=201) and **2010-2017 Group "B"** (n=272). The baseline characteristics were respectively n(%): age 56,6±11 vs. 59,8±10 years; females 21(10) vs. 38(14); diabetes 40(20) vs. 32(12) p=0.02; smoke 123(61) vs. 96(35) p=0.001; prior infarct 20(10) vs. 40(15); prior PCI 21(10) vs. 48(18) p=0.03; multivessel disease 109(54) vs. 129(47); anterior infarct 86(43) vs. 76(28) p=0.001; Killip Killamb C/D 17(8) vs. 11(4); visible thrombus 127(63) vs. 151(55); TIMI flow pre "0" 106(53) vs. 166(61); thromboaspiration 14(7) vs. 31(11); inhibitor GP IIb/IIIa 45(22) vs. 36(13) p=0.01; index multiple PCI 33(16) vs. 64(23) p=0.05; complete revascularization during hospitalization 7(3) vs. 42(15) p<0.002; radial access 7(3) vs. 165(61) p<0,01; ejection fraction 54,6±14 vs. 54,3±15.

RESULTS Clinical success 182(91) vs. 264(97) p=0.002; global mortality 10(5) vs. 5(1,8) p=0.05; cardiovascular mortality 9(4,4) vs. 5(1,8); re-AMI 3(1,4) vs. 5(1,8); acute coronary occlusion 2(0,9) vs. 5(1,8) and stroke 2(0,9) vs. 1(0,4).

CONCLUSION In the two periods of analysis, the populations presented differences between risk factors, antecedents and clinical presentation; although the incidence of multiple vessel disease remained constant. The introduction of TRA and early complete revascularization had an impact on the reduction of intrahospital major adverse events in the global population of ACS SST.

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The Impact of Initial Left Ventricular End Diastolic Pressure on the Incidence of Contrast-Induced Nephropathy in Patients with Acute Coronary Syndrome Undergoing Percutaneous Coronary Intervention



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BACKGROUND Left ventricular end-diastolic pressure (LVEDP) is a reflection of diastolic function and hydration status. We analyzed the relationship between LVEDP and the incidence of contrast-induced nephropathy (CIN) in patients with acute coronary syndrome (ACS) undergoing percutaneous coronary intervention (PCI).

METHODS Between January 2006 and December 2008, a total of 264 ACS patients had LVEDP assessed at the prior to PCI. CIN was defined as an increase in serum creatinine ≥25% from baseline or an absolute increase of >0.5mg/dL from baseline. Patients were divided into three groups according to baseline LVEDP (<12 mmHg, 12-20 mmHg and >20 mmHg). Baseline clinical, angiographic and procedural characteristics, as well as in-hospital and 12-month outcomes were collected.

RESULTS Baseline clinical characteristics were similar in all three groups. A total of 18 patients had an LVEDP<12 mmHg and only 1 (5.6%) developed CIN, 83 patients had and LVEDP=12-20 mmHg and 15 (18.1%) developed CIN, and 97 patients had an LVEDP >20 mmHg and 22 developed CIN (22.7%).